

* * * * * Welcome to STN International * * * * *

NEWS 1 Feb 2 Web Page URLs for STN Seminar Schedule - N. America
 NEWS 2 Jul 8 Important Derwent Announcement about CPI Changes to
 CPI Subscriber Indexing in 1999 - REVISED
 NEWS 3 Aug 9 Expanded Caplus Coverage of US, Japanese, WIPO
 and EPO Patents
 NEWS 4 Aug 23 Left Truncation Added to Several STN Files
 NEWS 5 Aug 30 The International Patent Classification in English
 and German available on STN
 NEWS 6 Aug 30 IFIRXA File has changed to IFICLS
 NEWS 7 Aug 30 IMSworld Pharmaceutical Company Profiles
 (IMSPROFILES) from IMS HEALTH now on STN
 NEWS 8 Sep 1 IFIPAT Pricing Changes
 NEWS 9 Sep 7 ESBIOBASE - Elsevier Biobase now on STN
 NEWS 10 Sep 20 ARCHIVE, REDISTRIBUTE SEARCH RESULTS WITH
 STN KEEP AND SHARE
 NEWS 11 Sep 29 Aluminum Industry Abstracts Now on STN
 NEWS 12 Oct 5 Elsevier's World Textiles now available on STN

NEWS EXPRESS STN Express 5.0 Now Available
 NEWS HOURS STN Operating Hours Plus Help Desk Availability
 NEWS INTER General Internet Information
 NEWS LOGIN Welcome Banner and News Items
 NEWS PHONE Direct Dial and Telecommunication Network Access to STN
 NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 09:03:04 ON 06 OCT 1999

=> file reg

| | | |
|----------------------|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.42 | 0.42 |

FILE 'REGISTRY' ENTERED AT 09:04:06 ON 06 OCT 1999

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 1999 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 05 OCT 99 HIGHEST RN 243672-10-8

DICTIONARY FILE UPDATES: 05 OCT 99 HIGHEST RN 243672-10-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 13, 1999

Please note that search-term pricing does apply when conducting SmartSELECT searches.

=> s cyclosporine

L1 6 CYCLOSPORINE

=> file ca

| | | |
|----------------------|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |

FULL ESTIMATED COST

3.91

4.33

FILE 'CA' ENTERED AT 09:04:56 ON 06 OCT 1999
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 1999 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE COVERS 1967 - 1 Oct 1999 (19991001/ED) VOL 131 ISS 15

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

Now you can extend your author, patent assignee, and title searches back to 1907. The records from 1907-1966 now have this searchable data in CAOLD. You now have electronic access to all of CA: 1907 to 1966 in CAOLD and 1967 to the present in CA on STN.

=> s l1

L2 9116 L1

=> e aerosol

| | | |
|-----|-----------|----------------------|
| E1 | 1 | AEROSMOOTHENERS/BI |
| E2 | 4 | AEROSOIS/BI |
| E3 | 37003 --> | AEROSOL/BI |
| E4 | 1 | AEROSOL18/BI |
| E5 | 1 | AEROSOL22/BI |
| E6 | 1 | AEROSOLAND/BI |
| E7 | 2 | AEROSOLATION/BI |
| E8 | 1 | AEROSOLBEHAELTERN/BI |
| E9 | 1 | AEROSOLD/BI |
| E10 | 1 | AEROSOLDEPOSITION/BI |
| E11 | 1 | AEROSOLDETN/BI |
| E12 | 1 | AEROSOLDISPENSING/BI |

=> s e3

L3 37003 AEROSOL/BI

=> s l2 and l3

L4 21 L2 AND L3

=> s tacrolimus

L5 0 TACOLIMUS

=> s tacrolimus

L6 654 TACROLIMUS

=> s l4 and l6

L7 1 L4 AND L6

=> d l7 1

L7 ANSWER 1 OF 1 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 126:135595 CA
 TI Aerosol drug formulations containing vegetable oils

IN Adjei, Akwete L.; Gupta, Pramod K.; Lee, Dennis Y.
 PA Abbott Laboratories, USA
 SO PCT Int. Appl., 23 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9640089 | A2 | 19961219 | WO 1996-US9654 | 19960607 |
| | WO 9640089 | A3 | 19970123 | | |
| | W: CA, JP, MX | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5635161 | A | 19970603 | US 1995-485222 | 19950607 |
| PRAI | US 1995-485222 | | 19950607 | | |

=> d 14 1-21

L4 ANSWER 1 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS

AN 131:189741 CA
 TI Fat emulsions for inhalational administration
 IN Sonoke, Satoru; Seki, Junzo
 PA Nippon Shinyaku Co., Ltd., Japan
 SO PCT Int. Appl., 36 pp.
 CODEN: PIXXD2

DT Patent
 LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9944594 | A1 | 19990910 | WO 1999-JP1004 | 19990303 |
| | W: CA, CN, JP, KR, RU, <u>US</u> , AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| PRAI | JP 1998-53159 | | 19980305 | | |

L4 ANSWER 2 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS

AN 131:161656 CA
 TI Liquid crystal forms of cyclosporin
 IN Bennett, David B.; Cabot, Kirsten M.; Foster, Linda C.;
 Lechuga-Ballesteros, David; Patton, John S.; Tan, Trixie K.
 PA Inhale Therapeutic Systems, Inc., USA
 SO PCT Int. Appl., 62 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9942124 | A1 | 19990826 | WO 1999-US3052 | 19990211 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRAI | US 1998-PV75422 | | 19980220 | | |

L4 ANSWER 3 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS

AN 130:272007 CA

TI Buccal spray or capsule compositions containing polar and non-polar solvents for transmucosal administration of drugs
 IN Dugger, Harry A., III
 PA Flemington Pharmaceutical Corporation, USA
 SO PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9916417 | A1 | 19990408 | WO 1997-US17899 | 19971001 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9748946 | A1 | 19990423 | AU 1997-48946 | 19971001 |
| PRAI WO 1997-US17899 | | 19971001 | | |

L4 ANSWER 4 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 129:297756 CA
 TI Cyclosporine **aerosol** in lung transplantation
 AU Burckart, Gilbert J.; Keenan, Robert J.; Iacono, Aldo T.; Griffith, Bartley P.
 CS University of Pittsburgh Medical Center, Pittsburgh, PA, USA
 SO Local Immunosuppr. Organ Transplants (1996), 131-139. Editor(s): Gruber, Scott A. Publisher: Landes, Austin, Tex.
 CODEN: 66OCAO
 DT Conference; General Review
 LA English

L4 ANSWER 5 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 128:261794 CA
 TI Pulmonary pharmacokinetics of cyclosporin A liposomes
 AU Arppe, J.; Vidgren, M.; Waldrep, J. C.
 CS Dep. Pharmaceuticals, Univ. Kuopio, Kuopio, Finland
 SO Int. J. Pharm. (1998), 161(2), 205-214
 CODEN: IJPHDE; ISSN: 0378-5173
 PB Elsevier Science B.V.
 DT Journal
 LA English

L4 ANSWER 6 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 128:212889 CA
 TI **Aerosol** cyclosporine prevents acute allograft rejection in experimental lung transplantation
 AU Mitruka, Surindra N.; Pham, Si M.; Zeevi, Adriana; Li, Sen; Cai, Jane; Burckart, Gilbert J.; Yousem, Samuel A.; Keenan, Robert J.; Griffith, Bartley P.
 CS Departments of Cardiothoracic Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA, 15261, USA
 SO J. Thorac. Cardiovasc. Surg. (1998), 115(1), 28-37
 CODEN: JTCSAQ; ISSN: 0022-5223
 PB Mosby-Year Book, Inc.
 DT Journal
 LA English

L4 ANSWER 7 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 128:196599 CA

TI Experimental pulmonary delivery of cyclosporin A by liposome
aerosol
AU Waldrep, J. C.; Arppe, J.; Jansa, K. A.; Vidgren, M.
CS One Baylor Plaza, Department of Molecular Physiology and Biophysics,
Baylor College of Medicine, Houston, TX, USA
SO Int. J. Pharm. (1998), 160(2), 239-250
CODEN: IJPHDE; ISSN: 0378-5173
PB Elsevier Science B.V.
DT Journal
LA English

L4 ANSWER 8 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
AN 128:188167 CA
TI Cyclosporine
AU Burckart, Gilbert J.; Keenan, Robert; Griffith, Bartley P.; Iacono, Aldo
T.
CS University of Pittsburgh School of Pharmacy, Pittsburgh, PA, USA
SO Lung Biol. Health Dis. (1997), 107(Inhalation Delivery of Therapeutic
Peptides and Proteins), 281-299
CODEN: LBHDD7; ISSN: 0362-3181
PB Marcel Dekker, Inc.
DT Journal; General Review
LA English

L4 ANSWER 9 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
AN 128:132441 CA
TI Medicinal cyclosporin A aerosol solutions
IN Bell, Alexander
PA Rhone-Poulenc Rorer Ltd., UK; Bell, Alexander
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9801147 | A1 | 19980115 | WO 1997-GB1851 | 19970707 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9734538 | A1 | 19980202 | AU 1997-34538 | 19970707 |
| EP 914143 | A1 | 19990512 | EP 1997-930662 | 19970707 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| PRAI GB 1996-14326 | | 19960708 | | |
| US 1996-23048 | | 19960802 | | |
| WO 1997-GB1851 | | 19970707 | | |

L4 ANSWER 10 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
AN 128:119664 CA
TI High dose liposomal aerosol formulations
IN Waldrep, J. Clifford; Knight, Vernon; Black, Melanie B.
PA Research Development Foundation, USA
SO PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

 PI WO 9800111 A1 19980108 WO 1997-US11696 19970702
 W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
 GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,
 MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
 TM, TT, UA, UG, UZ, VN
 RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
 GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
 GN, ML, MR, NE, SN, TD, TG
 US 5958378 A 19990928 US 1996-731605 19961016
 AU 9736508 A1 19980121 AU 1997-36508 19970702
 PRAI US 1996-675654 19960703
 US 1996-731605 19961016
 WO 1997-US11696 19970702

L4 ANSWER 11 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 127:314516 CA
 TI Cyclosporin A liposome **aerosol**: lack of acute toxicity in rats
 with a high incidence of underlying pneumonitis
 AU Gilbert, Brian E.; Black, Melanie B.; Waldrep, J. Clifford; Bennick,
 Jerry; Montgomery, Charles; Knight, Vernon
 CS Dep. Microbiol. Immunol., Baylor Coll. Med., Houston, TX, USA
 SO Inhalation Toxicol. (1997), 9(8), 717-730
 CODEN: INHTE5; ISSN: 0895-8378
 PB Taylor & Francis
 DT Journal
 LA English

L4 ANSWER 12 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 127:229170 CA
 TI Pulmonary delivery of intratracheally instilled and aerosolized
 cyclosporine A to young and adult rats
 AU Taljanski, Witold; Pierzynowski, Stefan G.; Lundin, Pal D. P.; Westrom,
 Bjorn R.; Eirefelt, Stefan; Podlesny, Jerzy; Dahlback, Magnus;
 Siwinska-Golebiowska, Henryka; Karlsson, Borje W.
 CS Department of Immunology, National Research Institute of Mother and Child,
 Warsaw, 01-211, Pol.
 SO Drug Metab. Dispos. (1997), 25(8), 917-920
 CODEN: DMDSAI; ISSN: 0090-9556
 PB Williams & Wilkins
 DT Journal
 LA English

L4 ANSWER 13 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 127:140432 CA
 TI High dose cyclosporin A and budesonide-liposome aerosols
 AU Waldrep, J. C.; Arppe, J.; Jansa, K. A.; Knight, V.
 CS Dep. Molecular Physiology Biophysics, Baylor College Medicine, Houston,
 TX, 77030, USA
 SO Int. J. Pharm. (1997), 152(1), 27-36
 CODEN: IJPHDE; ISSN: 0378-5173
 PB Elsevier
 DT Journal
 LA English

L4 ANSWER 14 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 126:135595 CA
 TI **Aerosol** drug formulations containing vegetable oils
 IN Adjei, Akwete L.; Gupta, Pramod K.; Lee, Dennis Y.
 PA Abbott Laboratories, USA
 SO PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9640089 | A2 | 19961219 | WO 1996-US9654 | 19960607 |
| | WO 9640089 | A3 | 19970123 | | |
| | W: CA, JP, MX | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5635161 | A | 19970603 | US 1995-485222 | 19950607 |
| PRAI | US 1995-485222 | | 19950607 | | |

L4 ANSWER 15 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS

AN 125:67721 CA

TI **Aerosol** formulations containing polyglycolized glycerides

IN Fu, Lu Mou-Ying; Adjei, Akwete L.; Gupta, Pramod K.

PA Abbott Laboratories, USA

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9606598 | A1 | 19960307 | WO 1995-US10469 | 19950816 |
| | W: AU, CA, JP, KR, MX | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5635159 | A | 19970603 | US 1994-296778 | 19940826 |
| | CA 2195874 | AA | 19960307 | CA 1995-2195874 | 19950816 |
| | AU 9533292 | A1 | 19960322 | AU 1995-33292 | 19950816 |
| | EP 777467 | A1 | 19970611 | EP 1995-929583 | 19950816 |
| | R: DE, FR, GB, IT | | | | |
| | JP 10505060 | T2 | 19980519 | JP 1995-508793 | 19950816 |
| PRAI | US 1994-296778 | | 19940826 | | |
| | WO 1995-US10469 | | 19950816 | | |

L4 ANSWER 16 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS

AN 123:350253 CA

TI **Aerosol** drug formulations containing vitamin E

IN Fu, Lu Mou-ying; Gupta, Pramod K.; Adjei, Akwete L.

PA Abbott Laboratories, USA

SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9524892 | A1 | 19950921 | WO 1995-US2764 | 19950302 |
| | W: AU, CA, JP, KR, MX | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9519804 | A1 | 19951003 | AU 1995-19804 | 19950302 |
| | JP 09510445 | T2 | 19971021 | JP 1995-524061 | 19950302 |
| | EP 804157 | A1 | 19971105 | EP 1995-912746 | 19950302 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
| PRAI | US 1994-212472 | | 19940314 | | |
| | WO 1995-US2764 | | 19950302 | | |

L4 ANSWER 17 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS

AN 120:173337 CA

TI Characterization and administration of cyclosporine liposomes as a small-particle **aerosol**

AU Gilbert, Brian E.; Wilson, Samuel Z.; Garcon, Nathalie M.; Wyde, Philip R.; Knight, Vernon

CS Dep. Microbiol. Immunol., Baylor Coll. Med., Houston, TX, 77030, USA
 SO Transplantation (1993), 56(4), 974-7
 CODEN: TRPLAU; ISSN: 0041-1337
 DT Journal
 LA English

L4 ANSWER 18 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 120:153272 CA
 TI Decreased oxidized glutathione with aerosolized cyclosporine delivery
 AU Katz, Aviva; Coran, Arnold G.; Oldham, Keith T.; Guice, Karen S.
 CS Dep. Surg., Univ. Michigan, Ann Arbor, MI, 48109-0245, USA
 SO J. Surg. Res. (1993), 54(6), 597-602
 CODEN: JSGRA2; ISSN: 0022-4804
 DT Journal
 LA English

L4 ANSWER 19 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 119:256383 CA
 TI Cyclosporin A liposome **aerosol**: Particle size and calculated
 respiratory deposition
 AU Waldrep, J. C.; Scherer, P. W.; Keyhani, K.; Knight, V.
 CS Cent. Biotechnol., Baylor Coll. Med., Woodlands, TX, 77381, USA
 SO Int. J. Pharm. (1993), 97(1-3), 205-12
 CODEN: IJPHDE; ISSN: 0378-5173
 DT Journal
 LA English

L4 ANSWER 20 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 115:287230 CA
 TI Small particle **aerosol** liposome and liposome-drug combinations
 for medical use
 IN Knight, Jack V.; Gilbert, Brian E.; Wilson, Samuel Z.; Six, Howard R.;
 Wyde, Philip R.
 PA Research Development Foundation, USA
 SO U.S., 18 pp. Cont.-in-part of U.S. Ser. No. 927,898, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 5049388 | A | 19910917 | US 1989-383383 | 19890721 |
| | JP 11222423 | A2 | 19990817 | JP 1998-336266 | 19871106 |
| | JP 11222424 | A2 | 19990817 | JP 1998-336267 | 19871106 |
| PRAI | US 1986-927898 | | 19861106 | | |
| | US 1988-239512 | | 19880901 | | |
| | JP 1987-280853 | | 19871106 | | |

L4 ANSWER 21 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 105:108133 CA
 TI Effects of cyclosporine on pulmonary clearance of Staphylococcus aureus
 and Pseudomonas aeruginosa
 AU Nugent, Kenneth M.; Kopp, William C.
 CS Coll. Med., Univ. Iowa, Iowa City, IA, USA
 SO J. Infect. Dis. (1986), 154(2), 352-5
 CODEN: JIDIAQ; ISSN: 0022-1899
 DT Journal
 LA English

=> d 14 1

L4 ANSWER 1 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 131:189741 CA
 TI Fat emulsions for inhalational administration
 IN Sonoke, Satoru; Seki, Junzo
 PA Nippon Shinyaku Co., Ltd., Japan
 SO PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9944594 | A1 | 19990910 | WO 1999-JP1004 | 19990303 |
| | W: CA, CN, JP, KR, RU, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| PRAI | JP 1998-53159 | | 19980305 | | |

=> d 14 2-20

L4 ANSWER 2 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 131:161656 CA
 TI Liquid crystal forms of cyclosporin
 IN Bennett, David B.; Cabot, Kirsten M.; Foster, Linda C.;
 Lechuga-Ballesteros, David; Patton, John S.; Tan, Trixie K.
 PA Inhale Therapeutic Systems, Inc., USA
 SO PCT Int. Appl., 62 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9942124 | A1 | 19990826 | WO 1999-US3052 | 19990211 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRAI | US 1998-PV75422 | | 19980220 | | |

L4 ANSWER 3 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 130:272007 CA
 TI Buccal spray or capsule compositions containing polar and non-polar solvents for transmucosal administration of drugs
 IN Dugger, Harry A., III
 PA Flemington Pharmaceutical Corporation, USA
 SO PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | WO 9916417 | A1 | 19990408 | WO 1997-US17899 | 19971001 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, | | | | |

UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
 GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
 GN, ML, MR, NE, SN, TD, TG

AU 9748946 A1 19990423 AU 1997-48946 19971001
 PRAI WO 1997-US17899 19971001

L4 ANSWER 4 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 129:297756 CA
 TI Cyclosporine **aerosol** in lung transplantation
 AU Burckart, Gilbert J.; Keenan, Robert J.; Iacono, Aldo T.; Griffith,
 Bartley P.
 CS University of Pittsburgh Medical Center, Pittsburgh, PA, USA
 SO Local Immunosuppr. Organ Transplants (1996), 131-139. Editor(s): Gruber,
 Scott A. Publisher: Landes, Austin, Tex.
 CODEN: 66OCAO
 DT Conference; General Review
 LA English

L4 ANSWER 5 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 128:261794 CA
 TI Pulmonary pharmacokinetics of cyclosporin A liposomes
 AU Arppe, J.; Vidgren, M.; Waldrep, J. C.
 CS Dep. Pharmaceutics, Univ. Kuopio, Kuopio, Finland
 SO Int. J. Pharm. (1998), 161(2), 205-214
 CODEN: IJPHDE; ISSN: 0378-5173
 PB Elsevier Science B.V.
 DT Journal
 LA English

L4 ANSWER 6 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 128:212889 CA
 TI **Aerosol** cyclosporine prevents acute allograft rejection in
 experimental lung transplantation
 AU Mitruka, Surindra N.; Pham, Si M.; Zeevi, Adriana; Li, Sen; Cai, Jane;
 Burckart, Gilbert J.; Yousem, Samuel A.; Keenan, Robert J.; Griffith,
 Bartley P.
 CS Departments of Cardiothoracic Surgery, University of Pittsburgh School of
 Medicine, Pittsburgh, PA, 15261, USA
 SO J. Thorac. Cardiovasc. Surg. (1998), 115(1), 28-37
 CODEN: JTCSAQ; ISSN: 0022-5223
 PB Mosby-Year Book, Inc.
 DT Journal
 LA English

L4 ANSWER 7 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 128:196599 CA
 TI Experimental pulmonary delivery of cyclosporin A by liposome
aerosol
 AU Waldrep, J. C.; Arppe, J.; Jansa, K. A.; Vidgren, M.
 CS One Baylor Plaza, Department of Molecular Physiology and Biophysics,
 Baylor College of Medicine, Houston, TX, USA
 SO Int. J. Pharm. (1998), 160(2), 239-250
 CODEN: IJPHDE; ISSN: 0378-5173
 PB Elsevier Science B.V.
 DT Journal
 LA English

L4 ANSWER 8 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 128:188167 CA
 TI Cyclosporine
 AU Burckart, Gilbert J.; Keenan, Robert; Griffith, Bartley P.; Iacono, Aldo

T.

CS University of Pittsburgh School of Pharmacy, Pittsburgh, PA, USA
 SO Lung Biol. Health Dis. (1997), 107(Inhalation Delivery of Therapeutic Peptides and Proteins), 281-299
 CODEN: LBHDD7; ISSN: 0362-3181
 PB Marcel Dekker, Inc.
 DT Journal; General Review
 LA English

L4 ANSWER 9 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 128:132441 CA
 TI Medicinal cyclosporin A **aerosol** solutions
 IN Bell, Alexander
 PA Rhone-Poulenc Rorer Ltd., UK; Bell, Alexander
 SO PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|--|----------|-----------------|----------|
| PI | WO 9801147 | A1 | 19980115 | WO 1997-GB1851 | 19970707 |
| | W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | AU 9734538 | A1 | 19980202 | AU 1997-34538 | 19970707 |
| | EP 914143 | A1 | 19990512 | EP 1997-930662 | 19970707 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | |
| PRAI | GB 1996-14326 | | 19960708 | | |
| | US 1996-23048 | | 19960802 | | |
| | WO 1997-GB1851 | | 19970707 | | |

L4 ANSWER 10 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 128:119664 CA
 TI High dose liposomal **aerosol** formulations
 IN Waldrep, J. Clifford; Knight, Vernon; Black, Melanie B.
 PA Research Development Foundation, USA
 SO PCT Int. Appl., 44 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 9800111 | A1 | 19980108 | WO 1997-US11696 | 19970702 |
| | W: | AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, UZ, VN | | | |
| | RW: | GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | US 5958378 | A | 19990928 | US 1996-731605 | 19961016 |
| | AU 9736508 | A1 | 19980121 | AU 1997-36508 | 19970702 |
| PRAI | US 1996-675654 | | 19960703 | | |
| | US 1996-731605 | | 19961016 | | |
| | WO 1997-US11696 | | 19970702 | | |

L4 ANSWER 11 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 127:314516 CA
 TI Cyclosporin A liposome **aerosol**: lack of acute toxicity in rats
 with a high incidence of underlying pneumonitis
 AU Gilbert, Brian E.; Black, Melanie B.; Waldrep, J. Clifford; Bennick,
 Jerry; Montgomery, Charles; Knight, Vernon
 CS Dep. Microbiol. Immunol., Baylor Coll. Med., Houston, TX, USA
 SO Inhalation Toxicol. (1997), 9(8), 717-730
 CODEN: INHTE5; ISSN: 0895-8378
 PB Taylor & Francis
 DT Journal
 LA English

L4 ANSWER 12 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 127:229170 CA
 TI Pulmonary delivery of intratracheally instilled and aerosolized
 cyclosporine A to young and adult rats
 AU Taljanski, Witold; Pierzynowski, Stefan G.; Lundin, Pal D. P.; Westrom,
 Bjorn R.; Eirefelt, Stefan; Podlesny, Jerzy; Dahlback, Magnus;
 Siwinska-Golebiowska, Henryka; Karlsson, Borje W.
 CS Department of Immunology, National Research Institute of Mother and Child,
 Warsaw, 01-211, Pol.
 SO Drug Metab. Dispos. (1997), 25(8), 917-920
 CODEN: DMDSAI; ISSN: 0090-9556
 PB Williams & Wilkins
 DT Journal
 LA English

L4 ANSWER 13 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 127:140432 CA
 TI High dose cyclosporin A and budesonide-liposome aerosols
 AU Waldrep, J. C.; Arppe, J.; Jansa, K. A.; Knight, V.
 CS Dep. Molecular Physiology Biophysics, Baylor College Medicine, Houston,
 TX, 77030, USA
 SO Int. J. Pharm. (1997), 152(1), 27-36
 CODEN: IJPHDE; ISSN: 0378-5173
 PB Elsevier
 DT Journal
 LA English

L4 ANSWER 14 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 126:135595 CA
 TI **Aerosol** drug formulations containing vegetable oils
 IN Adjei, Akwete L.; Gupta, Pramod K.; Lee, Dennis Y.
 PA Abbott Laboratories, USA
 SO PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9640089 | A2 | 19961219 | WO 1996-US9654 | 19960607 |
| | WO 9640089 | A3 | 19970123 | | |
| | W: CA, JP, MX | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5635161 | A | 19970603 | US 1995-485222 | 19950607 |
| PRAI | US 1995-485222 | | 19950607 | | |

L4 ANSWER 15 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 125:67721 CA
 TI **Aerosol** formulations containing polyglycolized glycerides

IN Fu, Lu Mou-Ying; Adjei, Akwete L.; Gupta, Pramod K.
 PA Abbott Laboratories, USA
 SO PCT Int. Appl., 28 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9606598 | A1 | 19960307 | WO 1995-US10469 | 19950816 |
| | W: AU, CA, JP, KR, MX | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5635159 | A | 19970603 | US 1994-296778 | 19940826 |
| | CA 2195874 | AA | 19960307 | CA 1995-2195874 | 19950816 |
| | AU 9533292 | A1 | 19960322 | AU 1995-33292 | 19950816 |
| | EP 777467 | A1 | 19970611 | EP 1995-929583 | 19950816 |
| | R: DE, FR, GB, IT | | | | |
| | JP 10505060 | T2 | 19980519 | JP 1995-508793 | 19950816 |
| PRAI | US 1994-296778 | | 19940826 | | |
| | WO 1995-US10469 | | 19950816 | | |

L4 ANSWER 16 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 123:350253 CA
 TI **Aerosol** drug formulations containing vitamin E
 IN Fu, Lu Mou-ying; Gupta, Pramod K.; Adjei, Akwete L.
 PA Abbott Laboratories, USA
 SO PCT Int. Appl., 18 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9524892 | A1 | 19950921 | WO 1995-US2764 | 19950302 |
| | W: AU, CA, JP, KR, MX | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9519804 | A1 | 19951003 | AU 1995-19804 | 19950302 |
| | JP 09510445 | T2 | 19971021 | JP 1995-524061 | 19950302 |
| | EP 804157 | A1 | 19971105 | EP 1995-912746 | 19950302 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
| PRAI | US 1994-212472 | | 19940314 | | |
| | WO 1995-US2764 | | 19950302 | | |

L4 ANSWER 17 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 120:173337 CA
 TI Characterization and administration of cyclosporine liposomes as a small-particle **aerosol**
 AU Gilbert, Brian E.; Wilson, Samuel Z.; Garcon, Nathalie M.; Wyde, Philip R.; Knight, Vernon
 CS Dep. Microbiol. Immunol., Baylor Coll. Med., Houston, TX, 77030, USA
 SO Transplantation (1993), 56(4), 974-7
 CODEN: TRPLAU; ISSN: 0041-1337
 DT Journal
 LA English

L4 ANSWER 18 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
 AN 120:153272 CA
 TI Decreased oxidized glutathione with aerosolized cyclosporine delivery
 AU Katz, Aviva; Coran, Arnold G.; Oldham, Keith T.; Guice, Karen S.
 CS Dep. Surg., Univ. Michigan, Ann Arbor, MI, 48109-0245, USA
 SO J. Surg. Res. (1993), 54(6), 597-602
 CODEN: JSGRA2; ISSN: 0022-4804
 DT Journal

LA English

L4 ANSWER 19 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
AN 119:256383 CA
TI Cyclosporin A liposome **aerosol**: Particle size and calculated
respiratory deposition
AU Waldrep, J. C.; Scherer, P. W.; Keyhani, K.; Knight, V.
CS Cent. Biotechnol., Baylor Coll. Med., Woodlands, TX, 77381, USA
SO Int. J. Pharm. (1993), 97(1-3), 205-12
CODEN: IJPHDE; ISSN: 0378-5173
DT Journal
LA English

L4 ANSWER 20 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
AN 115:287230 CA
TI Small particle **aerosol** liposome and liposome-drug combinations
for medical use
IN Knight, Jack V.; Gilbert, Brian E.; Wilson, Samuel Z.; Six, Howard R.;
Wyde, Philip R.
PA Research Development Foundation, USA
SO U.S., 18 pp. Cont.-in-part of U.S. Ser. No. 927,898, abandoned.
CODEN: USXXAM
DT Patent
LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 5049388 | A | 19910917 | US 1989-383383 | 19890721 |
| | JP 11222423 | A2 | 19990817 | JP 1998-336266 | 19871106 |
| | JP 11222424 | A2 | 19990817 | JP 1998-336267 | 19871106 |
| PRAI | US 1986-927898 | | 19861106 | | |
| | US 1988-239512 | | 19880901 | | |
| | JP 1987-280853 | | 19871106 | | |

=> d 14 6 13 14 17 20 all

L4 ANSWER 6 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
AN 128:212889 CA
TI **Aerosol** cyclosporine prevents acute allograft rejection in
experimental lung transplantation
AU Mitruka, Surindra N.; Pham, Si M.; Zeevi, Adriana; Li, Sen; Cai, Jane;
Burckart, Gilbert J.; Yousem, Samuel A.; Keenan, Robert J.; Griffith,
Bartley P.
CS Departments of Cardiothoracic Surgery, University of Pittsburgh School of
Medicine, Pittsburgh, PA, 15261, USA
SO J. Thorac. Cardiovasc. Surg. (1998), 115(1), 28-37
CODEN: JTCSAQ; ISSN: 0022-5223
PB Mosby-Year Book, Inc.
DT Journal
LA English
CC 1-7 (Pharmacology)
Section cross-reference(s): 63
AB The incidence of acute rejection and the morbidity of systemic
cyclosporine (INN: cyclosporin) after lung transplantation is significant.
Exptl. evidence suggests that the allograft locally modulates the immune
mechanisms of acute rejection. The purpose of this study was to det.
whether aerosolized cyclosporine would prevent acute cellular rejection,
achieve effective graft concns. with low systemic drug delivery, and
locally affect prodn. of the inflammatory cytokines involved in acute
rejection. Unilateral orthotopic left lung transplantation was performed
in 64 rats (ACI to Lewis), which were divided into eight groups (each
group, n = 8): group A, no treatment; groups B to D, **aerosol**

cyclosporine 1 to 3 mg/kg per day, resp.; groups E to H, systemic cyclosporine 2, 5, 10, and 15 mg/kg per day, resp. After the animals were killed on postoperative day 2, 4, or 6, the transplanted lung, native lung, spleen, and blood were collected. Histol. studies, high-pressure liq. chromatog. for trough cyclosporine concns., and reverse-transcriptase polymerase chain reaction for cytokine gene expression were performed. Untreated animals showed grade 4 rejection by postoperative day 6.

Aerosol cyclosporine prevented acute rejection in a dose-dependent fashion, with group D animals (3 mg/kg per day) showing minimal grade 1 changes. Among animals receiving systemic cyclosporine, only group H (15 mg/kg per day) controlled (grade 1) rejection. However, **aerosol** cyclosporine, at an 80% lower dose, achieved significantly lower concns. of cyclosporine in the graft (12,349 vs. 28,714 ng/mg, $p = 0.002004$) and blood (725 vs. 3306 ng/mL, $p = 0.000378$). Group F (systemic 5 mg/kg per day) had higher cyclosporine concns. in the blood than group D ($p = 0.004572$) and similar tissue concns. ($p = 0.115180$), yet had grade 2 rejection. Reverse-transcriptase polymerase chain reaction demonstrated equiv. suppression of inducible nitric oxide synthase but a 20- to 25-fold higher expression of interleukin-6, interleukin-10, and interferon- γ . in group D vs. group H recipient allografts. Local delivery of cyclosporine by **aerosol** inhalation dose-dependently prevented acute pulmonary allograft rejection. Effective graft levels and low systemic drug delivery required significantly lower doses than systemic therapy alone. The gene expression of proinflammatory cytokines involved in allograft rejection was suppressed by **aerosol** cyclosporine therapy.

- ST cyclosporine **aerosol** lung allotransplant rejection; inflammatory cytokine cyclosporine **aerosol** lung allotransplant
- IT Sprays (drug delivery systems)
 - (**aerosol** cyclosporine prevents acute allograft rejection in exptl. lung transplantation)
- IT Cyclophilins
 - Inflammatory cytokines
 - Interferon γ .
 - Interleukin 10
 - Interleukin 6
- RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 - (**aerosol** cyclosporine prevents acute allograft rejection in exptl. lung transplantation by affecting prodn. of inflammatory cytokines)
- IT Transplant rejection
 - (allo-; **aerosol** cyclosporine prevents acute allograft rejection in exptl. lung transplantation)
- IT Lung
 - (allograft; **aerosol** cyclosporine prevents acute allograft rejection in exptl. lung transplantation)
- IT Allograft
 - (lung; **aerosol** cyclosporine prevents acute allograft rejection in exptl. lung transplantation)
- IT 59865-13-3, Cyclosporine
 - RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (**aerosol** cyclosporine prevents acute allograft rejection in exptl. lung transplantation)
- IT 125978-95-2, Nitric oxide synthase
 - RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 - (inducible; **aerosol** cyclosporine prevents acute allograft rejection in exptl. lung transplantation by affecting prodn. of inflammatory cytokines)

L4 ANSWER 13 OF 21 Full-text? CA COPYRIGHT 1999 ACS
 AN 127:140432 CA
 TI High dose cyclosporin A and budesonide-liposome aerosols

AU Waldrep, J. C.; Arppe, J.; Jansa, K. A.; Knight, V.
CS Dep. Molecular Physiology Biophysics, Baylor College Medicine, Houston,
TX, 77030, USA
SO Int. J. Pharm. (1997), 152(1), 27-36
CODEN: IJPHDE; ISSN: 0378-5173
PB Elsevier
DT Journal
LA English
CC 63-6 (Pharmaceuticals)
AB The development of liposomal formulations for pulmonary delivery with jet
nebulizers has vast potential for future **aerosol** therapies.
Different variables det. the therapeutic efficacy of aerosols, including
formulation. The purpose of this study was to develop concd., high dose
liposomal formulations initially using immunosuppressive (cyclosporin A,
CsA) and anti-inflammatory drugs (budesonide, Bud) for targeted pulmonary
delivery with maximal **aerosol** output and particle size ranges
within the optimal range of 1-3 .mu.m mass median aerodynamic diam.
(MMAD). Results indicate that with increasing drug-liposome concns. there
is reduced nebulized mass output but an inversely proportional increase in
aerosol output of liposomes up to crit. starting concn. ranges of
21.3 mg CsA:160 mg 1,2-dilauroyl-sn-glycero-3-phosphocholine (DLPC)/mL and
Bud 12.5 mg:187.5 mg DLPC/mL. Above these concn. ranges (which were
unique for each formulation tested), there was a redn. in the liposome
aerosol output. With the increased liposome concns., there was a
linear increase in the apparent viscosity and redn. in apparent surface
tension, however, there were no demonstrable correlations between these
parameters and drug output rates. **Aerosol** particle size anal.
demonstrated that the MMAD increased minimally with higher liposome
concn. The size range of these high dose drug-liposome aerosols is
optimal for penetration into the lung periphery.
ST cyclosporin budesonide liposome **aerosol**
IT Liposomes (drug delivery systems)
(aerosols; high-dose cyclosporin A and budesonide-liposome aerosols)
IT Drug targeting
Interfacial tension
Lung
Particle size distribution
Viscosity
(high-dose cyclosporin A and budesonide-liposome aerosols)
IT Lecithins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(high-dose cyclosporin A and budesonide-liposome aerosols)
IT 18194-25-7, Dilauroylphosphatidylcholine 51333-22-3, Budesonide
59865-13-3, Cyclosporin A
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(high-dose cyclosporin A and budesonide-liposome aerosols)

L4 ANSWER 14 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS
AN 126:135595 CA
TI **Aerosol** drug formulations containing vegetable oils
IN Adjei, Akwete L.; Gupta, Pramod K.; Lee, Dennis Y.
PA Abbott Laboratories, USA
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2

DT Patent
LA English
IC ICM A61K009-72
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1, 2, 15

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | WO 9640089 | A2 | 19961219 | WO 1996-US9654 | 19960607 |
| | WO 9640089 | A3 | 19970123 | | |

W: CA, JP, MX
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
US 5635161 A 19970603 US 1995-485222 19950607
PRAI US 1995-485222 19950607
AB Pharmaceutical compns. for **aerosol** delivery comprising (a) a medicament, (b) a non-chlorofluorocarbon propellant, and (c) a vegetable oil or a pharmaceutically acceptable deriv. thereof, as well as a method for prep. such compns. in which unwanted aggregation of the medicament is prevented without the use of surfactants, protective colloids or cosolvents.
ST drug **aerosol** vegetable oil formulation
IT Peptides, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Delhirelix; **aerosol** drug formulations contg. vegetable oils)
IT Allergy inhibitors
Bronchodilators
Expectorants
Immunosuppressants
Propellants
Sprays (drug delivery systems)
.beta.-Adrenoceptor agonists
.beta.-Adrenoceptor antagonists
(**aerosol** drug formulations contg. vegetable oils)
IT Steroids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**aerosol** drug formulations contg. vegetable oils)
IT Growth factors (animal)
Halo alkanes
Interferons
Leukotrienes
Neuropeptides
Olive oil
Peptides, biological studies
Prostaglandins
Safflower oil
Soybean oil
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**aerosol** drug formulations contg. vegetable oils)
IT Vegetable oils
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(unsatd.; **aerosol** drug formulations contg. vegetable oils)
IT 51-43-4, Epinephrine 59-42-7, Phenylephrine 431-89-0 530-08-5, Isoetharine 586-06-1, Metaproterenol 811-97-2, HFC-134a 1490-04-6, Menthol 7683-59-2, Isoproterenol 9003-98-9, DNase 9011-97-6, Cholecystokinin 9034-40-6D, Lhrh, analogs 11096-26-7, Erythropoietin 16110-51-3, Cromolyn 18559-94-9, Albuterol 22839-47-0, Aspartame 23031-25-6, Terbutaline 53123-88-9, Rapamycin 53714-56-0 57982-77-1 59865-13-3, Cyclosporin A 60205-81-4, Ipratropium 63775-95-1, Cyclosporin b 65807-02-5 74436-00-3, Cyclosporin g 76932-56-4, Nafarelin 104987-11-3, Tacrolimus 104987-12-4, Ascomycin 120287-85-6, Cetorelix 135215-95-1
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**aerosol** drug formulations contg. vegetable oils)
IT 9015-94-5, Renin, biological studies 80619-02-9, 5-Lipoxygenase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; **aerosol** drug formulations contg. vegetable oils)

L4 ANSWER 17 OF 21 Full-text? CA COPYRIGHT 1999 ACS
AN 120:173337 CA

TI Characterization and administration of cyclosporine liposomes as a small-particle **aerosol**

AU Gilbert, Brian E.; Wilson, Samuel Z.; Garcon, Nathalie M.; Wyde, Philip R.; Knight, Vernon

CS Dep. Microbiol. Immunol., Baylor Coll. Med., Houston, TX, 77030, USA

SO Transplantation (1993), 56(4), 974-7
CODEN: TRPLAU; ISSN: 0041-1337

DT Journal

LA English

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1

AB Systemically administered CsA has not consistently suppressed the pulmonary immunoreactivity that leads to rejection in lung transplant patients. Pulmonary T cells from patients given CsA systemically still retain their immunoreactivity, which can be suppressed with added CsA. Direct application of CsA by **aerosol** to the respiratory epithelium should achieve high lung concns. with min. systemic effects. In the present study, CsA was most efficiently incorporated into liposomes composed of egg yolk phosphatidylcholine at a molar ratio of CsA to egg yolk phosphatidylcholine of 1:20. [These CsA liposomes retained their biol. activity and were as effective as free CsA in the suppression of anti-CD3-stimulated [3H]thymidine incorporation by mouse spleen cells. The generation of a small particle **aerosol** of CsA liposomes had no effect on this biol. activity. CsA liposome **aerosol** particles have a mass median aerodynamic diam. of 2 .mu.m, which allows for distribution of drug throughout the respiratory tract. Quantitation of CsA in the lungs and blood of mice exposed to CsA liposome aerosols for 4 days showed that as little as 15 min daily (0.11 mg/kg/day) was sufficient to achieve an estd. concn. of CsA in respiratory secretions of 6 .mu.g/mL without detectable blood levels. Thus, CsA liposomes can be produced and aerosolized that achieve pulmonary concns. with sufficient immunosuppressive activity to be effective in the treatment of lung diseases.

ST cyclosporine liposome small particle **aerosol**

IT Respiratory tract
(**aerosol** liposome small particles contg. cyclosporine administration to)

IT Immunosuppressants
(cyclosporine, **aerosol** liposomes, characterization and administration of, as small-particles)

IT Particle size
(of **aerosol** liposomes contg. cyclosporine)

IT Pharmaceutical dosage forms
(aerosols, liposomes, cyclosporine, characterization and administration of small-particle)

IT Phosphatidylcholines, biological studies
RL: BIOL (Biological study)
(egg yolk, **aerosol** liposomes contg. cyclosporine and, characterization and administration of, as small-particles)

IT 59865-13-3, Cyclosporine
RL: BIOL (Biological study)
(**aerosol** liposomes, characterization and administration of, as small-particles)

L4 ANSWER 20 OF 21 **Full-text?** CA COPYRIGHT 1999 ACS

AN 115:287230 CA

TI Small particle **aerosol** liposome and liposome-drug combinations for medical use

IN Knight, Jack V.; Gilbert, Brian E.; Wilson, Samuel Z.; Six, Howard R.; Wyde, Philip R.

PA Research Development Foundation, USA

SO U.S., 18 pp. Cont.-in-part of U.S. Ser. No. 927,898, abandoned.
CODEN: USXXAM

DT Patent
LA English
IC ICM A61K037-22
NCL 424450000
CC 63-6 (Pharmaceuticals)
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 5049388 | A | 19910917 | US 1989-383383 | 19890721 |
| | JP 11222423 | A2 | 19990817 | JP 1998-336266 | 19871106 |
| | JP 11222424 | A2 | 19990817 | JP 1998-336267 | 19871106 |
| PRAI | US 1986-927898 | | 19861106 | | |
| | US 1988-239512 | | 19880901 | | |
| | JP 1987-280853 | | 19871106 | | |

AB Disclosed are aq. **aerosol** droplets contg. liposome or interacted liposome-drug combination particles in a continuous phase of air or oxygen-enriched air advantageous for the treatment of a wide variety of diseases. The drug is interacted with the liposome membrane so that on its rupture the drug is not lost from the liposome. The majority of the **aerosol** droplets contg. the liposome particles alone or with drugs has a diam. .1toeq.5 .mu.m and has an aerodynamic mass median diam. 1-3 .mu.m, and the liposome and interacted-liposome drug particles are substantially uniform in size and .1toeq.1 .mu.m in diam., thereby providing deposition of the droplets throughout a respiratory tract of a patient when inhaled. Thus, enviroxime-contg. liposomes were prepd. and tested for the animal tolerance to show safety for human use.

ST liposome **aerosol** droplet respiratory tract; enviroxime liposome **aerosol**

IT Respiratory tract
(**aerosol** droplets contg. liposome particles for delivery to, oxygen-enriched air for)

IT Analgesics
Antibiotics
Antidiabetics and Hypoglycemics
Antihistaminics
Antihypertensives
Antihypotensives
Cardiotonics
Hypnotics and Sedatives
Immunomodulators
Neoplasm inhibitors
Parasitocides
Tranquilizers and Neuroleptics
Vaccines
(**aerosol** droplets contg. liposome particles of)

IT Estrogens
Hormones
Steroids, biological studies
RL: BIOL (Biological study)
(**aerosol** droplets contg. liposome particles of)

IT Receptors
RL: BIOL (Biological study)
(blockers, **aerosol** droplets contg. liposome particles of)

IT Glycosides
RL: BIOL (Biological study)
(cardiac, **aerosol** droplets contg. liposome particles of)

IT Atomization
(of pharmaceutical liposomes, for **aerosol** delivery)

IT Pharmaceutical dosage forms
(aerosols, liposomes, oxygen-enriched air in, for inhalation)

IT Bronchodilators
(antiasthmatics, **aerosol** droplets contg. liposome particles of)

IT Fungicides and Fungistats

Virucides and Virustats

(medical, **aerosol** droplets contg. liposome particles of)

IT 50-53-3, Chlorpromazine, biological studies 53-03-2, Prednisone
 59-05-2, Methotrexate 71-63-6, Digitoxin 94-20-2 652-67-5,
 Isosorbide 768-94-5, Amantadine 1397-89-3, Amphotericin B
 59277-89-3, Acyclovir **59865-13-3**, Cyclosporine A 72301-79-2,
 Enviroxime

RL: BIOL (Biological study)

(**aerosol** droplets contg. liposome particles of)

=> d his

(FILE 'HOME' ENTERED AT 09:03:04 ON 06 OCT 1999)

FILE 'REGISTRY' ENTERED AT 09:04:06 ON 06 OCT 1999

L1 6 S CYCLOSPORINE

FILE 'CA' ENTERED AT 09:04:56 ON 06 OCT 1999

L2 9116 S L1

E AEROSOL

L3 37003 S E3

L4 21 S L2 AND L3

L5 0 S TACOLIMUS

L6 654 S TACROLIMUS

L7 1 S L4 AND L6

=>